

Mississippi Transitional Refresher Course

Pathophysiology

Course Objectives

Minimum course length 12 hours

Course Description

This course provides information on the abnormal functions of illness and disease processes in the human body.

Course Competencies Stated in Performance Terms:

Upon completion of this course, the student will be able to:

1. Explain the general concepts of Pathophysiology of the assessment and management of the emergency patient.
2. Explain the general concepts of Pathophysiology in the management of the emergency patient.
3. Discuss cellular adaptation.
4. Describe cellular injury and cellular death.
5. Describe the factors that precipitate diseases in the human body.
6. Describe the cellular environment.
7. Discuss analyzing disease risk.
8. Describe aging as a risk for disease.
9. Discuss familial diseases and associated risk factors.
10. Describe multiple organ dysfunction syndrome.
11. Discuss fetal and neonatal immune function.
12. Discuss the effect of aging on the mechanisms of self- defense.
13. Describe homeostasis as a dynamic steady state.
14. List types of tissue.

15. Describe the systemic manifestations that result from cellular injury.
16. Describe neuroendocrine regulation.
17. Describe environmental risk factors.
18. Discuss combined effects and interaction among risk factors.
19. Discuss the inter-relationships between stress, coping, and illness.
20. Utilize Pathophysiology in patient assessment and treatment
 1. Integumentary System
 2. Skeletal
 3. Nervous
 4. Endocrine
 5. Circulatory
 6. Lymphatic
 7. Respiratory
 8. Digestive
 9. Urinary/Renal
 10. Reproductive
 11. Special Senses
21. Define the characteristics of the immune response.
22. Discuss induction of the immune system.
23. Discuss aging and the immune function in the elderly.
24. Describe the inflammation process.
25. Discuss the role of mast cells as a part of the inflammation process.
26. Describe the plasma protein system.
27. Discuss the cellular components of inflammation..
28. Describe the systemic manifestations of inflammation response.
29. Describe the resolution and repair from inflammation.
30. Discuss hypersensitivity.
31. Describe deficiencies in immunity and inflammation.

32. Discuss hypoperfusion.
33. Define cardiogenic, hypovolemic, neurogenic, anaphylactic, and septic shock.